

ABSTRACT

An organic light-light conversion device excellent in device characteristics, comprising a light sensing unit having a layer including a photo-conductive organic semiconductor developing a photo-current multiplication phenomenon by light irradiation, and a light emitting unit having a layer including an electroluminescent organic semiconductor emitting light by current injection, characterized in that at least one of the photo-conductive organic semiconductor and an electroluminescent organic semiconductor is polymer semiconductor. An imaging intensifier consisting of a plurality of arranged above organic light-light conversion devices. An optical sensor provided with a means of measuring and outputting voltages applied to the above organic light-light conversion device and to the opposite ends of a layer including the electroluminescent organic semiconductor.